ABSTRACT

A DC to DC converter comprising an energy storage element comprising an energy storage element input and an energy storage element output, the energy storage element input coupled to receive a first power level and the energy storage element output providing a second power level. The converter also comprises a feedback circuit comprising a feedback input and a feedback output, the feedback input coupled to the energy storage element output. The converter further comprises a regulator circuit comprising a regulator circuit feedback input and a regulator circuit output, the regulator circuit feedback input coupled to the feedback output and the regulator circuit output coupled to the energy storage element input, the regulator circuit regulating the input of the first power level to the energy storage element input. When a signal at the regulator circuit feedback input is above a threshold level the regulator circuit ceasing operation and when the signal at the regulator circuit feedback input is below the threshold level the regulator circuit is enabled.